Message

From: Wu, Jennifer [Wu.Jennifer@epa.gov]
Sent: 11/15/2018 12:30:52 AM
To: Mann, Laurie [mann.laurie@epa.gov]; Cope, Ben [Cope.Ben@epa.gov]; Merz, Martin [merz.martin@epa.gov]
CC: Soscia, Mary Lou [Soscia.Marylou@epa.gov]
Subject: RE: Point Source Data

And group, I just talked with Laurie and will look over the spreadsheet once Martin finishes. I'm comfortable with sharing the WA hydro NPDES permits information in the spreadsheet.

From: Mann, Laurie
Sent: Wednesday, November 14, 2018 4:22 PM
To: Cope, Ben <Cope.Ben@epa.gov>; Wu, Jennifer <Wu.Jennifer@epa.gov>; Merz, Martin <merz.martin@epa.gov>
Cc: Soscia, Mary Lou <Soscia.Marylou@epa.gov>
Subject: RE: Point Source Data

Martin,
Can you please reply (to all) with your more detailed spreadsheet?
Jenny,
Please look and make sure you are comfortable with the information for our future NPDES permits in Martin's spreadsheet.
Go team!

From: Cope, Ben
Sent: Wednesday, November 14, 2018 4:20 PM
To: Mann, Laurie <mann.laurie@epa.gov>; Wu, Jennifer <Wu.Jennifer@epa.gov>; Merz, Martin <merz.martin@epa.gov>
Cc: Soscia, Mary Lou <Soscia.Marylou@epa.gov>
Subject: RE: Point Source Data

No to this spreadsheet. Use Martin's more detailed one. And definitely don't send any of the future growth numbers. That's provisional.

Suggest added caveat "…assuming the river has capacity for these discharges, which we are analyzing now".

-BC

From: Mann, Laurie
Sent: Wednesday, November 14, 2018 4:10 PM
To: Cope, Ben <Cope.Ben@epa.gov>; Wu, Jennifer <Wu.Jennifer@epa.gov>; Merz, Martin <merz.martin@epa.gov>
Cc: Soscia, Mary Lou <Soscia.Marylou@epa.gov>
Subject: FW: Point Source Data

Ben, Jenny & Martin,
Dan has asked Mary Lou to share our "point source data" with the Northwest Pulp & Paper Industry, so that we are fully responsive to their request for information.

Two questions:

1. Is the attached spreadsheet the best spreadsheet to send, or do we want to remove Jenny's NPDES data, or our future source calculations?? The attached was the one sent by Renee today.

2. Please verify that this is a correct statement: "EPA's plans to develop WLAs that allow for continued discharge for all current NPDES dischargers, with an additional room for growth in all segments of the river"

From: Mann, Laurie
Sent: Wednesday, November 14, 2018 3:56 PM
To: Soscia, Mary Lou <Soscia.Marylou@epa.gov>
Subject: FW: Point Source Data

Mary Lou,
Everything about this spreadsheet is current except for some of the loadings for future sources (so if you are focusing on existing sources, this should work). If you have any questions, Martin is your guy!

From: CamachoRincon, Rene <Rene.CamachoRincon@tetratech.com>
Sent: Wednesday, November 14, 2018 11:29 AM
To: Wu, Jennifer <Wu.Jennifer@epa.gov>; Cope, Ben <Cope.Ben@epa.gov>; Merz, Martin <merz.martin@epa.gov>; Mann, Laurie <mann.laurie@epa.gov>
Cc: Lincoln, Erin <Erin.Lincoln@tetratech.com>; Teresa Rafi <teresa.rafi@tetratech.com>
Subject: RE: Point Source Data

Hi Jennifer,

That is correct. I prepared a summary Excel Workbook with the list of major, minor and "growth" point sources included in the Columbia and Snake River RBM10 model. The list shows the location of the point sources as they are configured right now in the RBM10-PS model setup. I would like to ask you and Ben to please review the workbook and confirm that the entries are correct.

Please let me know if you have any questions or comments,

Thanks
Rene

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From: Wu, Jennifer <Wu.Jennifer@epa.gov>
Sent: Wednesday, November 14, 2018 12:02 PM
To: CamachoRincon, Rene <Rene.CamachoRincon@tetratech.com>; Cope, Ben <Cope.Ben@epa.gov>; Merz, Martin <merz.martin@epa.gov>; Mann, Laurie <mann.laurie@epa.gov>
Cc: Lincoln, Erin <Erin.Lincoln@tetratech.com>; Rafi, Teresa <teresa.rafi@tetratech.com>
Subject: RE: Point Source Data

Hey Rene, yes, you're right. I assume you changed the spreadsheet to have the sum of the flows include Grand Coulee, which the previous version didn't have. That gets to 18.1oC.

From: CamachoRincon, Rene <Rene.CamachoRincon@tetratech.com>
Sent: Wednesday, November 14, 2018 8:54 AM
To: Wu, Jennifer <Wu.Jennifer@epa.gov>; Cope, Ben <Cope.Ben@epa.gov>; Merz, Martin <merz.martin@epa.gov>; Mann, Laurie <mann.laurie@epa.gov>
Cc: Lincoln, Erin <Erin.Lincoln@tetratech.com>; Teresa Rafi <teresa.rafi@tetratech.com>
Subject: RE: Point Source Data

Jennifer,

FYI. I found a wrong record in the spreadsheet. In the minor point sources for the Columbia River between Grand Coulee and Chief Joseph the temperature is 121.7 C. The temperature should be 18.1 C. Please let me know if this is correct.

Thanks
Rene

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From: Wu, Jennifer <Wu.Jennifer@epa.gov>
Sent: Tuesday, November 13, 2018 2:10 PM
To: CamachoRincon, Rene <Rene.CamachoRincon@tetratech.com>; Cope, Ben <Cope.Ben@epa.gov>; Merz, Martin <merz.martin@epa.gov>; Mann, Laurie <mann.laurie@epa.gov>
Cc: Lincoln, Erin <Erin.Lincoln@tetratech.com>; Rafi, Teresa <teresa.rafi@tetratech.com>
Subject: RE: Point Source Data

Hi All,
Attached above is the new point source spreadsheet with additions/edits on Grand Coulee, Lower Granite, The Dalles and John Day dams.

A few things to know about the dam discharge info:
*Bonneville Dam, The Dalles Dam, John Day Dam, and McNary Dam discharges are for WA outfalls alone. They don't include outfalls discharging into OR waters. You need to get that info from Oregon or ask them for the application data. They only have a permit for Bonneville Dam. Laurie/Ben/Martin, let me know if this is important, and you want to discuss more.
*The Grand Coulee Dam temperature and flows are missing some data. Info for spreadsheet are reasonable for now, but I'll follow up with Martin if we get more info on the discharges,
*The Dalles Dam temperature is estimated based on averaging Bonneville Dam and John Day dam temperatures. The Dalles Dam only has temperature from the winter.
*I noticed Chief Joseph Dam is not on the list. We don't have any information on this yet, but may be getting an application shortly. Laurie/Ben/Martin, If you need this sooner rather than later, please let me know.

From: CamachoRincon, Rene <Rene.CamachoRincon@tetratech.com>
Sent: Monday, November 12, 2018 9:27 AM
To: Cope, Ben <Cope.Ben@epa.gov>; Merz, Martin <merz.martin@epa.gov>; Mann, Laurie <mann.laurie@epa.gov>
Cc: Wu, Jennifer <Wu.Jennifer@epa.gov>; Lincoln, Erin <Erin.Lincoln@tetratech.com>; Teresa Rafi

<teresa.rafi@tetratech.com>
Subject: RE: Point Source Data

Hi Ben,

Perfect timing. Thanks for sharing the updated PS spreadsheet. We finalized the point source model setup (only major PS) and code updates and we are ready to start including the minor point sources and future growth loads.

So, in response to you your comments and directions:

- Major point sources: Completed including placeholders for PS missing flow and temps
- Minor point sources: Will start including them at midpoint of model reaches. I will provide you with a table describing the location where we included the PS.
- Future growth heat loads: Will include them at midpoints between dams using a separate input line in the control file.

Thanks Ben,

Rene

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From: Cope, Ben <Cope.Ben@epa.gov>
Sent: Monday, November 12, 2018 12:10 PM
To: Merz, Martin <merz.martin@epa.gov>; Mann, Laurie <mann.laurie@epa.gov>
Cc: Wu, Jennifer <Wu.Jennifer@epa.gov>; Lincoln, Erin <Erin.Lincoln@tetratech.com>; CamachoRincon, Rene <Rene.CamachoRincon@tetratech.com>
Subject: Re: Point Source Data

Martin -

Thanks. I'm adding Tetra Tech so they can see the status or our point source info in the attached revised spreadsheet as they prep for point source run.

Martin I agree the future growth idea was questionable and have scrapped it for a better idea, I think. See new tab for future growth. I have done a grand total of heat load for all NPDES - major and minor, Columbia and Snake. Then I take 5% of that load and spread it across 15 dam reaches. This uniformly adds a reasonable load to each reach.

Note also my edits to calculate flow-weighted avg temps. I tried to color all my adds brown.

Erin, Rene - I propose the model setup as follows:

- Majors are individual model inputs

- Minors are lumped by reach and added at midpoints

- Future growth uniform flow/temp added at midpoints

We may change the future growth based on results but unlikely to change minor aggregate loading, so best to have two lines of control file input at each midpoint so we can easily change future growth.

Jenny - we need the dam flows/temps ASAP. We have put placeholders in that you can overwrite. Please give us max temps since our prime focus is summer and I would think the cooling water changes with seasons.

We are going to land this thing...

-BC

From: Merz, Martin
Sent: Friday, November 9, 2018 4:03 PM
To: Cope, Ben; Mann, Laurie
Cc: Wu, Jennifer
Subject: Point Source Data

Hello All,

Point source work is complete, but ideally we will wait for Jenny to fill in a few values for the NPDES dam temps and flows before sending to TT. She plans to do these quick calcs this weekend perhaps, or first thing Tuesday. I attached spreadsheet here for Jenny to fill in easily and send back to you guys. (Jenny – LOOK FOR BRIGHT YELLOW HIGHLIGHT).

Quick note:
Future growth values applied to the bubbles seem huge – 10% of Portland area discharge applied to some of the less point-source-heavy reaches dominates the point sources in those reaches. I have a table of Snake and Columbia future growth on a tab, look at these values then scroll through minor source bubble allocations and imagine applying to each reach. May want to modify the approach a bit. If you're happy with the future growth numbers, we can tell TT to apply to each reach and make sure equations (SUM and AVERAGE) are adjusted to account for new value to sum/avg.

Best,

Martin Merz
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